

Claims

What is claimed is:

- 5 1. An actuator arm for use in a rotary actuator assembly having a bearing cartridge assembly with a stationary shaft adapted to be fastened to a disc drive base plate and an outer bearing sleeve rotatably connected to the stationary shaft, the actuator arm comprising:
 a generally flat sheet metal body having upper and lower surfaces and an actuator bore passing therebetween, wherein the actuator bore is sized to receive the bearing cartridge assembly
10 therethrough; and
 a plurality of tabs projecting inward from an interior surface of the actuator bore, wherein the tabs extend only partially along a depth of the actuator bore between the upper and lower surfaces, wherein the tabs contact and secure the bearing cartridge assembly within the actuator bore.
- 15 2. The actuator arm of claim 1 wherein the plurality of tabs comprises six tabs.
3. The actuator arm of claim 1 wherein each of the tabs extends more than half way between the upper and lower surfaces in the bore of the depth of the actuator assembly.
- 20 4. The actuator arm of claim 1 wherein an expansion space is formed below each of the tabs between the interior surface of the actuator bore and the sleeve of the bearing cartridge assembly when the bearing cartridge assembly is inserted in the bore.
5. The actuator arm of claim 1, wherein the sleeve has a flange having an outer diameter
25 greater than a diameter of the actuator bore.

6. An actuator assembly for use in a data storage device, that actuator assembly comprising:

a single actuator body having upper and lower surfaces and a circular bore therethrough, the circular bore having a bore diameter and a plurality of tabs projecting from an interior surface of the actuator body into the actuator bore, wherein the tabs extend only partially
5 between the upper and lower surfaces of the actuator body; and

a bearing cartridge assembly having a stationary shaft connected to the disc drive housing and an outer sleeve rotatably connected to the stationary shaft, wherein the sleeve is press-fit into and secured within the actuator bore by the tabs.

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7. The assembly of claim 6 wherein the plurality of tabs are equally spaced around the actuator bore.

8. The assembly of claim 7 comprising an even number of tabs.

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9. The assembly of claim 7 comprising six tabs.

10. The apparatus of claim 7 wherein a diameter of the actuator bore between a pair of opposite tabs is equal to a diameter of the sleeve of the bearing cartridge.

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11. The assembly of claim 7, wherein the sleeve comprises a flange located above the actuator body, a contact region located generally within the actuator bore, and a lower region located below the actuator body.

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12. The assembly of claim 11 wherein each tab extends only partially along the actuator bore.

13. The assembly of claim 12 wherein the bearing sleeve, the tabs, and the actuator bore together define an expansion space below each of the tabs.

14. The assembly of claim 6 wherein the actuator assembly comprises only a single actuator body supported on the bearing cartridge assembly.

5 15. The assembly of claim 14 further comprising a snap ring fastened in an annular groove beneath the actuator body on the bearing sleeve to retain the actuator body on the sleeve.

16. A disc drive comprising:
an actuator assembly;
a bearing cartridge assembly having a stationary shaft connected to the disc drive housing and a sleeve pivotally connected to the stationary shaft; and

5 means for attaching the actuator assembly to the sleeve of the bearing cartridge assembly.

17. The disc drive of claim 16 wherein the actuator assembly has upper and lower surfaces and an actuator bore disposed therebetween and the means comprises a plurality of tabs
10 connected to an interior surface of the actuator bore, wherein the tabs extend only partially between the upper and lower surfaces of the actuator assembly.